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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/013,091

12/07/2001

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12/14/2007

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EXAMINER

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ART UNIT

PAPER NUMBER

2163

NOTIFICATION DATE

DELIVERY MODE

12/14/2007

ELECTRONIC

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/013,091
Filing Date: December 07, 2001
Appellant(s): ZARGHAM ET AL.

Philip S. Lyren
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 09/05/2007 appealing from the Office action
mailed March 21, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

2002/0013759	Stewart	01-2002
2002/0026630	Schmidt	02-2002
6,058,389	Chandra	5-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-2, 5-8, 10-13, 15-16, and 19-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Stewart (US 2002/0013759).

Regarding claims 1, 11 and 15, Stewart discloses a method, a system, and a computer readable medium embodying computer program code configured to cause a computer to perform steps for providing enriched publish and subscribe in an enterprise (See Figs 12-13, 21-23 and 26, and page 15, paragraphs [0233-0234], and pages 18-19, paragraphs [0303-0305]) running as a zero latency enterprise (ZLE) (See page 19, paragraph [0312]), the enterprise experiencing a plurality of events occurring in association with business transactions conducted at a plurality of sites across the enterprise (See page 13, paragraph [0196] and page 19, paragraph [0305]), the method comprising:

initiating, in real time, a process responsive to an event (See page 10, paragraph [0124], event corresponding to collaborations of trading partners for discussion or conversation related to business transactions), the process including

- publishing to a central repository (central repository corresponds to c-space, see [0113]) one or more messages prompted by that event containing information from that event (See page 10, paragraph [0124], lines 6-7), respective information from the plurality of events being aggregated in the central repository (See page 13, paragraph [0201]) where the aggregated information can, in real-time, be accessible (See page 13, paragraph [0201]) and available for extraction and analysis from across the enterprise (See paragraphs [0227], lines 11-14 and [0233]),
- updating the aggregated information with information from the published messages (See paragraphs [0202] and [0032] and [0033]),
- enriching new messages with information from that event and/or corresponding information extracted from the central repository (See paragraphs [0033] and [0083] and [0121]) and
- subscribing to the enriched new messages (See [0233-0234]).

Regarding claims 2 and 12, Stewart discloses wherein the central repository operates as an information broker between applications such that applications publish messages to the central repository and subscribe to messages from the central, rather than exchange request-response messages directly with each other (See [0214-0216] and [0223]).

Regarding claims 5 and 20, Stewart discloses predefining a schema for each of the applications, the schema identifying which of the plurality of events and types of data changes its

respective application is interested in, the schema further identifying any information its respective application needs for performing tasks related to such events (See page 11, paragraphs [0137-0138], and page 18, paragraph [0282] to page 19, paragraph [0305]); and storing each schema in the central repository for later use in enriching the new messages (See page 11, paragraph [0137], lines 6-12).

Regarding claim 6, Stewart discloses wherein the applications cause the updating of aggregated information at the central repository upon a change of information in their environment (See page 14, paragraph [0219-0220]).

Regarding claim 7, Stewart discloses wherein the published messages and subscribed messages are formatted in XML (See [0233-0234]).

Regarding claims 8 and 13, Stewart discloses wherein the central repository is based on a database which can be updated with information from new events while being queried and which can send the enriched messages to multiple subscribers, thereby leveraging an innate parallelism, scalability and reliability of the database (See paragraphs [0137-0139]).

Regarding claim 10, Stewart discloses wherein the enriched new messages to which an application subscribes can include extracted information that was previously published to the central repository by other one or more applications (See page 15, paragraphs [0227-0228]).

Regarding claim 16, Stewart disclose a system for enriched publish and subscribe operations associated with business transactions conducted by an enterprise running as a zero latency enterprise (ZLE), the system being implemented in a ZLE framework (See Figs 1-3) and comprising:

- one or more applications via which the business transactions are conducted (See 106, 108, 110, 112, 114, Fig. 1); and
- an operational data store (ODS) (Hub 132, Fig. 3), the ODS being operatively communicative with the one or more applications such that the applications are capable to publish messages to and subscribe to messages from the ODS (See Fig 6 and page 7, paragraph [0089] to page 8, paragraph [0113]), the ODS being configured
 - to operate as a dynamic central repository that consolidates information from across the enterprise (See page 12, paragraph [0150]) and supports business transactional access to real time information from any of the one or more applications (See page 13, paragraphs [0201], [0206]),
 - to know what particular information any one of the applications needs in order to accomplish its task (See page 13, paragraphs [0114] and [0198]), the particular information enriching messages to which the applications subscribe (See page 13, paragraph [0206]), and
 - to update the consolidated information with information from messages published by the applications (See paragraphs [0202] and [0032] and [0033]).

Regarding claim 19, Stewart discloses wherein the particular information for enriching messages subscribed to by an application can be information previously published by another application (See [0226-0227]).

Regarding claim 22, Stewart discloses further discloses an inference-based rules engine that finds an appropriate business rule, regardless of the complexity of rules or the size of any rules set, the inference-based rules engine facilitating a rules service that integrates the rules and policies of the enterprise in the ODS (See page 6, paragraph [0073] and page 9, paragraphs [0117] and [0120]); and a process-flow engine that manages a flow of the business transactions, processes, and messages between the applications integrated via the ZLE framework (Work Flow Server 104, Fig. 1, and [0081] and [0139]).

Regarding claim 23, Stewart discloses providing personalized feedback and/or customized offers in real time to a customer while a customer is still engaged (See paragraph [0083]).

Regarding claim 24, Stewart discloses where the corresponding information is mined and/or analyzed in real time (See paragraph [0059]).

Regarding claim 25, Stewart discloses wherein the ZLE virtual hub includes a plurality of applications for performing information mining and/or analysis(See paragraph [0059]).

Regarding claim 26, Steward discloses wherein the ZLE virtual hub includes a plurality of technology adapters for loosely coupling applications to and logically arranging applications around the ZLE virtual hub (See page 7, paragraph [0089] to page 8, paragraph [0113]).

Regarding claim 27, Steward discloses wherein a plurality of applications for performing information mining and/or analysis, are loosely coupled to the ZLE virtual hub via said technology adapters (See Fig. 6).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart (US 2002/0013759), in view of Schmidt (US 2002/0026630).

Regarding claim 4, Stewart discloses all the claimed subject matter as set forth above in claim 1. However, Stewart is silent as to wherein the central repository provides a coherent view, in real time, of the aggregated information from across the enterprise, the process being founded on the coherent view of the aggregated information. On the other hand, Schmidt teaches an integrated view of the aggregated information from across the enterprise (See page 9, paragraph [0253], [0288], Schmidt et al.). It would have been obvious to one having ordinary

skill in the art at the time of the invention was made to incorporate a coherent view of Schmidt to the aggregated information of Stewart. The motivation would have been providing browsing for desired information.

Regarding claim 18, Stewart/Schmidt discloses wherein the consolidated information can, in real-time, be accessible and available for extraction and analysis from across the enterprise (See [0150], [0227], lines 11-14, and [0279], Stewart et al.), the ODS providing for a coherent view of the consolidated information, in real time, from across the enterprise as addressed above in claim 4.

3. Claims 9, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart (US.2002/0013759), in view of Chandra (US 6,058,389).

Regarding claims 9 and 14, Stewart discloses all the claimed subject matter as set forth above. However, Stewart is silent as to wherein the central repository includes relational database management functionality that caches and queues the published and subscribed messages. On the other hand, Chandra teaches relational database management functionality that caches and queues the published and subscribed messages (See col. 4, lines 6-16, and col. 35, lines 15-67, Chandra et al.). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a relational database management functionality that caches and queues the published and subscribed messages as suggested by Chandra. The motivation would have been to store published and subscribed messages in a predetermined order so that messages would be easily managed, queried, or handled in later time.

Regarding claim 17, Stewart/ Chandra discloses wherein the ODS is configured with a cluster-aware relational database management (RDBMS) functionality that is capable of handling periodic queries (See col. 35, lines, 20-21, Chandra et al.), message queueing and store state engine operations (See col. 35, lines 30-48, Chandra et al.), and handling transactions, including insertion, updating and deletion of transactions (See col. 3, lines 40-67, Chandra et al.).

Allowable Subject Matter

4. Claims 3 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

(10) Response to Argument

Response to Applicants' arguments on 102 rejection:

Claims 1, 11 and 15:

Applicants argue Stewart does not teach publishing message to a central repository. Applicants also state that Stewart expressly teaches that messages are published to other participants. The Examiner respectfully disagrees. Page 10, paragraph [0124] recites "initiates the flow of messages among the c-space, and then starts the execution and publishing 264 of such messages so that other participants may join in the conversation" which shows messages being flowed and published among the c-space (c-space corresponds to Applicants' "central repository") so that participants may join in the conversation. Page 8, paragraphs [0112] and

[0113] describes c-space is a collaboration space which utilizes asynchronous XML messaging capabilities to allow communication between trading partners.

Applicants argue Stewart does not teach the messages are prompted by an event and contain information from the event. The Examiner respectfully disagrees. Page 10, paragraph [0124] recites “publishing such messages so that other participants may join in the conversation”, wherein Applicant’s event corresponds to collaborations of trading partners for discussion or conversations related to business transactions (paragraph [0119] discloses sets of related messages are exchanged between trading partners and paragraph [0021] discloses trading partner may request proposals or negotiating prices with multiple vendors concurrently via conversations within a given c-space). Thus, Stewart teaches messages are prompted when trading partners want to negotiate and execute business transactions (paragraph [0059]) and contain information about the negotiation or proposals.

Applicants argue Stewart does not teach information from the plurality of events is aggregated at a central repository. Examiner respectfully disagrees. Page 13, paragraph [0201] discusses trading partner requests and is granted access to particular conversations from the c-space (central repository). Thus, one having ordinary skill in the art would have recognized that conversations being aggregated in the c-space (central repository).

Applicants argue Stewart does not teach information is “accessible and available for extraction across the enterprise”. The Examiner respectfully disagrees. Page 13, paragraph [0201] teaches information is accessible as to trading partner requests and is granted access to particular conversations from the c-space (central repository). Page 15, paragraph [0233] teaches information is accessible and available for extraction as to trading partner subscribe to messages

from one c-space, transform them to the vocabulary of a second c-space, and then publish the transformed message into the second c-space.

Applicants argue Stewart does not teach updating aggregated information with information from published message. The Examiner respectfully disagrees. Page 3, paragraph [0032] and [0033] discloses "As conversations and business processes are initiated, executed and completed, conversation management software tracks and manages these long-living conversations, ensures that they are completed, and orchestrates the overall process execution...The collaboration system uses such context information to help ensure that messages from one conversation do not get tangled up with messages from another. For example, an individual trading partner may be requesting proposals or negotiating prices with multiple vendors concurrently, and must maintain the integrity and security of each interaction". Thus by managing long-living conversations and by ensuring that messages from one conversation do not get tangled up with messages from another, Stewart teaches updating aggregated information with information from published message.

Applicants argue Stewart does not teach enriching messages with information from the event and/or corresponding information extracted from the central repository. The Examiner respectfully disagrees. Page 3, paragraph [0033] discloses "The collaboration system uses such context information to help ensure that messages from one conversation do not get tangled up with messages from another" and page 7, paragraph [0083] discloses "messages from different trading partners...are filtered by the collaboration server, and routed to the collaboration server, and routed to the appropriate recipients in a true collaborative fashion", thus messages are being enriched.

Claim 16:

Applicants argues Stewart does not teach "the applications are capable to publish messages to and subscribe messages from the ODS". The Examiner respectfully disagrees. Fig. 6 show the c-hub (corresponds to Applicants' ODS) architecture (paragraphs [0089], [0090], [0091]) wherein the message flow through the c-hub begins with an incoming message 172 from a trading partner via proceeds to the hub rounder and then proceeds down as an outgoing message 188 to the recipient trading partners. Fig. 1 and paragraphs [0082-0084] shows collaboration system including application server 102 and collaboration server 116 that having routing and filtering mechanism, wherein message from different trading partners are filtered by the collaboration server and routed to the appropriate recipients. Thus, Stewart teaches applications (such as applications of Fig. 1) are capable to publish messages to and subscribe messages from the c-hub.

Applicants argue Stewart does not teach the ODS knows what particular information the applications need to accomplish their tasks. The Examiner respectfully disagrees. Paragraph [0114] discloses "the c-hub is the execution engine of a c-space, allowing the c-space owner and trading partners to create, route, and manage messages within the trading environment" and paragraph [0198] discloses "the c-space owner defines the collaboration process, or the means in which transactions will be conducted. Outlining "collaborations" involves...defining...process flows and transaction behavior that will take place within the c-spaces...Once the roles have been established, the types of messages that each trading partner can receive can be configured". Thus, base on the above recitations, the c-hub is the execution engine of a c-space that configures

the types of messages based on the means defined by the c-space owners. Therefore, the c-hub (ODS) knows what particular information the applications need to accomplish their tasks.

Applicants argue Stewart does not teach the ODS updates consolidated information with information from messages published by the applications. The Examiner respectfully disagrees. Page 3, paragraph [0032] and [0033] discloses "As conversations and business processes are initiated, executed and completed, conversation management software tracks and manages these long-living conversations, ensures that they are completed, and orchestrates the overall process execution...The collaboration system uses such context information to help ensure that messages from one conversation do not get tangled up with messages from another. For example, an individual trading partner may be requesting proposals or negotiating prices with multiple vendors concurrently, and must maintain the integrity and security of each interaction". Thus by managing long-living conversations and by ensuring that messages from one conversation do not get tangled up with messages from another, Stewart teach updating consolidated information with information from messages published by the applications.

Response to Applicants' arguments on 103 rejection:

Applicants states that Stewart fails to teach or suggest all the elements of independent claims and thus respective dependent claims are allowable over Stewart in view of Schmidt/Chandra. The Examiner respectfully point out that Stewart teach all the elements as addressed above.

(11) Related Proceeding(s) Appendix

Application/Control Number:
10/013,091
Art Unit: 2163

Page 15

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

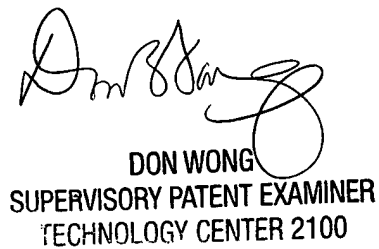
For the above reasons, it is believed that the rejections should be sustained.

Respectively submitted,

Conferees:
Merilyn Nguyen
Patent Examiner, AU 2163

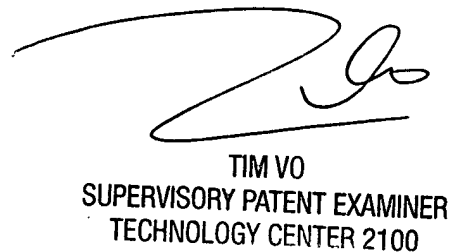


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